

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Canceled)

2. (New) A telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about states of entities within the platform, the entities comprising at least one resource and at least one object within a call processing system, the OAM&P system comprising:

a hierarchy of managed objects, each managed object having input states, output states and a defined logical relation among the input states and the output states, managed objects having output states that form the input states of other managed objects comprising state information servers, and managed objects having input states that are formed by output states of other managed objects comprising state information clients;

a state distributor system that identifies state information clients registered for an output state change and that notifies the identified state information clients of the output state change;

a registry that registers at least one specified managed object with the state distributor system so that the at least one specified managed object will receive at least one specified output state as an input state, the one or more specified managed objects thereby each becoming a state information client; and

a response system that responds to a change in an output state of a managed object and sends a transition indicating the output state change to the state distributor system.

3. (New) The telecommunications services network platform according to claim 2, wherein managed objects which comprise state information servers need not have information concerning all state information clients that are registered to receive their output states, and wherein the hierarchy of managed objects may thus be easily modified.

4. (New) The telecommunications services network platform according to claim 2, wherein the state distributor system provides the ability to register bound variables interested in a state, the bound variables being able to take on as a value any of a large set of supported types.

5. (New) The telecommunications services network platform according to claim 4, wherein the large set of supported types includes basic types, instances of other classes, and lists of basic types or objects.

6. (New) The telecommunications services network platform according to claim 2, wherein a state may be represented by a bound variable, which can have a value comprising a basic type, an instance of another class, and a list of basic types or objects.

7. (New) The telecommunications services network platform according to claim 2, in which each managed object further registers with the state distributor system the functions the managed object can perform.

8. (New) A telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about a state of entities within the

platform, the entities comprising at least one resource and at least one object within a call processing system, the OAM&P system comprising:

- a hierarchy of managed objects, each managed object having input states, output states, and a defined logical relation among the input states and the output states, the output state of at least one managed object being an input state of at least one other managed object;

- a development system that creates a managed object using a first high level programming language, by specifying input states of the managed object, output states of the managed object, and a logical relation between the output states and input states for the managed object;

- a first compiler that compiles managed objects specified in the first high level programming language into code represented in a second high level programming language;
- and

- a second compiler that compiles the code represented in the second high level programming language into lower level code;

thereby allowing a developer to create managed objects using the first high level programming language so that the developer may concentrate on defining the logic between input and output states.

9. (New) The telecommunications services network platform according to claim 8, wherein the lower level code comprises executable machine code.

10. (New) A telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about states of entities within the platform,

the entity comprising at least one resource and at least one object within a call processing system, the OAM&P system comprising:

a hierarchy of managed objects, each managed object having input states, output states, and a defined logical relation among the input states and the output states;

a template defining system that defines a plurality of object templates, each defined object template having a list of functions the object can perform, and a defined logical relation among input states and output states, each defined object template representing a basic structure to be utilized in creating transient objects; and

a parent managed object that instantiates one or more transient objects at run time of the OAM&P system as a function of the types and amount of each type of resources used by the platform.

11. (New) The telecommunications services network platform according to claim 10, wherein each transient object is dynamically created to correspond to a hardware environment of the platform.

12. (New) The telecommunications services network platform according to claim 10, in which each managed object registers the functions the managed object can perform.

13. (New) A method for use in a telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about states of entities within the platform, the entities comprising at least one resource and at least one object within a call processing system, the method comprising:

providing a hierarchy of managed objects, each managed object having input states, output states and a defined logical relation among the input states and the output states, managed objects having output states that form the input states of other managed objects comprising state information servers, and managed objects having input states that are formed by output states of other managed objects comprising state information clients;

identifying state information clients registered for an output state change at a state distributor system that notifies the identified state information clients of the output state change;

registering at least one specified managed object with the state distributor system so that the at least one specified managed object will receive at least one specified output state as an input state, the one or more specified managed objects becoming state information clients; and

responding to a change in an output state of a managed object and sending a transition indicating the output state change to the state distributor system.

14. (New) The method according to claim 13, wherein managed objects which comprise state information servers need not have information concerning all state information clients that are registered to receive their output states, and wherein the hierarchy of managed objects may thus be easily modified.

15. (New) The method according to claim 13, wherein the state distributor system provides the ability to register bound variables interested in a state.

16. (New) The method according to claim 13, wherein a state may be represented by a bound variable, which can have a value comprising a basic type, an instance of another class, and a list of basic types or objects.

17. (New) The method according to claim 13, in which each managed object further registers with the state distributor system the functions the managed object can perform.

18. (New) A method for use within telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about a state of entities within the platform, the entities comprising at least one resource and at least one object within a call processing system, the method comprising:

providing a hierarchy of managed objects, each managed object having input states, output states, and a defined logical relation among the input states and the output states, the output state of at least one managed object being an input state of at least one other managed object;

creating a managed object using a first high level programming language, by specifying input states of the managed object, output states of the managed object, and a logical relation between the output states and input states for the managed object;

compiling managed objects specified in the first high level programming language into code represented in a second high level programming language; and

compiling the code represented in the second high level programming language into lower level code.

19. (New) The method according to claim 18, wherein the lower level code comprises executable machine code.

20. (New) A method for use within telecommunications services network platform comprising an OAM&P system for gathering and maintaining information about states of entities within the platform, the entity comprising at least one resource and at least one object within a call processing system, the method comprising:

providing a hierarchy of managed objects, each managed object having input states, output states, and a defined logical relation among the input states and the output states;

defining a plurality of object templates, each defined object template having a list of functions the object can perform, and a defined logical relation among input states and output states, each defined object template representing a basic structure to be utilized in creating transient objects; and

instantiating one or more transient objects at run time of the OAM&P system as a function of the types and amount of each type of resources used by the platform.

21. (New) The method according to claim 20, in which the instantiating further comprises dynamically creating each transient object to correspond to a hardware environment of the platform.

22. (New) The method according to claim 20, further comprising registering, for each managed object, the functions the managed object can perform.